

REMARKS

Claims 1, 6-16, 25 and 34-37 were pending and claims 1, 6-16, 25, and 34-37 stand rejected. By virtue of this response, no claims have been cancelled, claims 12 and 34 have been amended, and new claims 38 and 39 have been added. Accordingly, claims 1, 6-16, 25, and 34-39 are currently under consideration. Support for the amendment and new claims may be found throughout the present application, including the claims as originally presented, and no new matter has been added.

For the Examiner's convenience, Applicants' remarks are presented in the same order in which they were raised in the Office Action.

Claim Rejections under 35 USC §103

Claims 1, 6-16, 25, and 34-37 stand rejected under 35 USC § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,173,322 to Hu (hereinafter, "Hu") in view of U.S. Patent No. 6,185,601 to Wolff (hereinafter, "Wolff").

Claims 1, 6-11, 14, 25, and 34-36

Applicants respectfully traverse the rejection and submit that the combination fails to disclose or suggest either of the following limitations of claim 1: 1) "after receiving the web page request, determining whether a predetermined condition exists at the first web server," or 2) "redirecting by the first web server the web page request from the first web server to another web server of the plurality for servicing."

i) The combination of references fails to disclose or suggest "after receiving the web page request, determining whether a predetermined condition exists at the first web server."

Initially it is noted that the Examiner has failed to allege that the combination of Hu and Wolff discloses or suggests the above recited features of claim 1. Specifically, as seen on Page 4 of the final Office Action, the Examiner has merely stated that Hu discloses a method comprising "determin[ing] whether a predetermined condition exist [sic] at the first web server (i.e., failed or overloaded)(see col. 15, lines 11-16)," but has failed to allege that this process is performed "after"

the web page request is assigned to a web server. Therefore, the Examiner has failed to present a *prima facie* case of obviousness (MPEP § 2142), and the rejection should be withdrawn.

In any event, Applicants submit that the combination fails to disclose or suggest this feature. For instance, as described at column 15, lines 11-16 of Hu (cited by the Examiner for disclosing these features of claim 1), pinger module 218 monitors content servers 106. Pinger module 218, however, “merely places the content server lists into a queue and pings one at a time,” and when at the front of the queue “pings” the content server by “opening a network connecting, issuing a test request, and waits to see if a result comes back. If content sever 106 does not respond within a set amount of time, it is presumed to be down.” (Col. 14, lines 42-50). Accordingly, Hu fails to disclose or suggest, “after receiving the web page request, determining whether a predetermined condition exists at the first web server,” and redirecting the web page request as required by claim 1.

The addition of Wolff fails to disclose or reasonably suggest modifying Hu to meet these features of claim 1. For example, Wolff describes at least with respect to FIGs. 7A-7D that the “cluster node database 120A is maintained by periodic updates from each of the nodes as to their current utilization.” (Col. 24, lines 9-11) (Emphasis added). Accordingly, determining whether a predetermined condition exists at the first web server is not performed “after receiving the web page request,” and redirecting the web page request as required by claim 1. Furthermore, any such modification to Hu to meet the features of claim 1 would impermissibly alter the principle of operation of Hu (i.e., at least with respect to the operation of pinger module 218)

ii) The combination of references fails to disclose or suggest “redirecting by the first web server the web page request from the first web server to another web server of the plurality for servicing.”

The Examiner concedes on page 5 of the final Office Action that Hu fails to disclose this feature, stating “Hu is silent regarding: redirecting by the first web server the web page request from the first web server to another web server[] of the plurality for servicing.” The Examiner relies on Wolff for this deficiency, stating that:

Wolff discloses a methods [sic] for load rebalancing for clients requests in a network with plurality of servers inducing redirecting by the first server web server (104A) the web page request form the first web server to another web servers of the plurality for servicing (see figs. 6, 7A and col. 15, lines 15-42). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention presented with teaching Hu to incorporate the load balancing mechanism as suggested by Wolff, thus enabling the re-mapping of client request in response to a redirection command emanating form an overloaded node, e.g., server, thereby allowing the clients to optimize throughput between themselves and the network servers.

Applicants disagree and submit that Wolff fails to describe redirecting by the web server; in contrast, Wolff describes throughout that the client re-maps a path through a plurality of nodes to a resource in response to an overloaded node (e.g., server). For instance, Wolff is clear that Fig. 6 illustrates a table of an aware client 102A, in accordance with the client load balancing of Fig. 1A. As described with respect to Fig. 1A:

In FIG. 1A, an embodiment of client load rebalancing is shown. Client load rebalancing refers to the ability of a client, enabled with processes in accordance with the current invention, to re-map a path through a plurality of nodes to a resource. The re-mapping may take place in response to a redirection command emanating from an overloaded node, e.g. server. This capability allows the clients to optimize throughput between themselves and the resources accessed by the nodes. A network which implements this embodiment of the invention, can dynamically rebalance itself to optimize throughput by migrating client I/O requests from overutilized pathways to underutilized pathways. (Col. 4: 51-62)(Emphasis added).

Further, the portion cited by the Examiner in support of the rejection is explicit in this regard, describing the enabled-client as:

An enabled-client is one which has special clustered file system-aware software installed. The enabled-client has all the capabilities of a normal client, with some important additions. Clustered file system awareness allows availability, scaling, symmetry, single system image, and load-balancing to transparently be extended to the public network. The enabled-client now views the exposed clustered file system as a single system image, not a group of symmetric nodes. This is an important abstraction that allows the virtualization of the clustered file system. The software on the enabled-client presents this single system image to the operating system and all client applications transact through this virtual interface. The software translates the I/O request to the virtual interface to an actual transaction to a particular CIN. Availability is automatic because I/O recovery is accomplished when the I/O to

a failed CFN is redirected to another CFN for completion, after which, the original I/O is completed successfully back through the virtual interface. Scaling and load-balancing are accomplished automatically as the enabled-client is able to redirect I/O to another cluster node at the request of the clustered file system. (Col. 15, lines 6-33) (Emphasis added).

Accordingly, it is apparent that server 104A does not itself redirect the request to another server (e.g., server 104) as asserted by the Examiner; rather, it is the “aware client” that re-maps a path through a plurality of nodes to access a resource. At most, Wolff discloses that the re-mapping takes place in response to a redirection command (from a server), but fails to disclose or suggest that a server itself redirects the request to another server as required by claim 1.

Accordingly, for at least these reasons, the rejection must be withdrawn and claim 1 allowed. Additionally, claims depending from claim 1 are allowable for at least the same reasons as claim 1.

Claims 34-36

Applicants respectively traverse the rejection to claims 34-36. With regard to claim 34, the Examiner states that Wolff discloses the features of claim 1; in particular, that Wolff discloses that the agent instructs the first web server to redirect using commands given through the web server interface. Applicants disagree – as discussed above, Wolff is clear that the client re-maps a path through a plurality of nodes to a resource in response to an overloaded node (e.g., server), but does not disclose that the client instructs a node or server, let alone through a web interface, to redirect the request. Accordingly, the rejection to claim 34 should be withdrawn for these additional reasons.

With regard to the rejection to dependent claims 35 and 36, the Examiner has completely failed to allege the features recited in claims 35 and 36 are disclosed or suggested by the cited references. As seen on page 8 of the final Office Action, the rejection to claims 35 and 36 only refers to features of claim 34. Accordingly, the rejection should be withdrawn.

Claims 12, 13, and 39

Claim 12 has been amended herein to include the features of previously presented claim

1. Applicants respectfully submit that the features of claim 12 are not disclosed or suggested by the combination of Hu and Wolff. The rejection to the previously presented features of claim 12 relies on Hu, and in particular, identifies Fig. 6, col. 12, lines 10-42, and col. 13, lines 1-21 as disclosing these features. However, these sections of Hu do not teach or suggest a step of redirecting a request “only if a request is for a web page that does not have state,” as recited by claim 12.

First, “state” as recited in claim 12 refers to whether a user has established or may establish a stateful session with the first web server. For example, as described at page 8, lines 21-29 and page 23, lines 4-12 of the specification, state may include information identifying the user, specifying web pages the user has already requested, items the user has selected for purchase, and so on. Accordingly, Hu’s disclosure of cached web pages fails to disclose or suggest redirecting based on “state” as recited by claim 12.

Second, Applicants respectfully submit that Hu determines whether a web page is cached or not, and if the page is cached, then Hu causes its network request manager to act as a proxy for the request, rather than redirect a client to “allow client 104 to contact directly ... the content server.” (Col. 6, lines 18-23.) Thus, caching in Hu does not suggest redirecting the web page request as recited in claims 12 and 13.

Accordingly, for at least these reasons claims 12, 13, and 39 are allowable over the combination of references and the rejection must be withdrawn.

Claims 15 and 16

Claim 15 recites features similar to those of claim 1 discussed above. Accordingly, Applicants respectfully submit that the combination of Hu and Wolff does not disclose or suggest an interceptor as well as a first web server that is “operable to redirect, from the first web server to a second web server of the plurality, a web page request made of the first web server, if a predetermined condition is determined to exist at the first web server,” for at least the same reasons

as discussed with respect to claim 1. Accordingly, the rejection to claim 15 must be withdrawn and claims 15 and 16 allowed.

Claim 37

Claim 37 is a Beauregard type claim having features similar to the method of claim 1, and Applicants respectfully submit that claim 34 is allowable over the combination of Hu and Wolff for at least similar reasons described with respect to claim 1.

CONCLUSION

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no. 324212005500. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: February 1, 2008

Respectfully submitted,

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